To whom it may concern,

I am a third year student from UConn majoring in molecular and cell biology. Over the course of my undergraduate experience I have immersed myself deeply within this subject area and have grown as an intellectual and academic by taking full advantage of the vast opportunities that the university provides to its STEM students. One particular way I have done so is by working on an independent research project. With this, I am a part of an on campus lab that uses structure based techniques to develop and design novel antibiotics that are effective against drug resistant infectious agents. While conducting the research project, I have participated in numerous activities and events that have both reaffirmed and increased my desire to pursue this field. For example, this past summer I traveled to Brookhaven National Laboratory to complete a portion of my experiment. At the laboratory I used a technique called X-ray diffraction. In short, this allowed me to view on a computer screen how the drug compounds and the pathogen, both infinitesimally small, physically interact with one another. The data collected gives insight on how to improve upon the efficacy of the drug and allows for the generation of new antibiotics. This was absolutely amazing and an experience uncommon for many undergraduates. Prior to travelling to the lab I had never seen or utilized such powerful technology and experimental methodology. So jumping right into the lab and using this technique for my own project was truly thrilling. Also, the fact alone that my research team applied, and then was granted access to use the Brookhaven National Lab freely, was very exciting. This shows that a Department of Energy funded laboratory believed that our research was so important that it should be conducted on their facility.

I will be continuing my research until the date of my graduation and will continue devoting ample amount of time and energy to the advancement of this project. In fact, I plan on dedicating my entire summer break in order to further the agenda of the experiment. However, in order to allocate time over the summer, I need financial support. Many students typically use the break as a time to generate a source of income. I would pick up random jobs in order to pay for books, food, and other demands throughout the school year. Although this provides some support, it has no benefit to my overall goals and career. However, if I am granted a summer fellowship, programs that provide student researchers with funding, I will be able to forgo working a summer job and have that financial assistance come from research, which is something I am attracted to and has the potential to make a difference within cell biology and pharmacy.

I am in complete support of the Next Generation CT initiative. Passage of this proposal will provide more Connecticut students similar opportunities to the ones that have defined my academic career. These experiences are invaluable and will contribute to a smarter and better versed work force. There is no doubt in my mind that this is essential for STEM students, education, and larger, the state of Connecticut.

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Molecular and Cell Biology

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